

**Microsemi Corp.**

The diode experts

ALSO  
AVAILABLE IN  
SURFACE  
MOUNT

SANTA ANA, CA

For more information call:  
(714) 979-8220

**1N5615  
thru  
1N5623**

☆JANS☆

## FEATURES

- MICROMINIATURE PACKAGE
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- FAST RECOVERY
- PIV TO 1000 VOLTS
- JANS/TX/TVX TYPES AVAILABLE PER MIL-S-19500/429

## MAXIMUM RATINGS

Operating Temperature:  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$ .

Storage Temperature:  $-65^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$ .

Thermal Resistance:  $-38^{\circ}\text{C/W}$

Surge Current: 25A.

## ELECTRICAL CHARACTERISTICS

TYPE	PEAK INVERSE VOLTAGE (MAX.) PIV	BREAKDOWN VOLTAGE (MIN.) B <sub>V</sub> @ 50 μA	AVERAGE RECTIFIED CURRENT I <sub>O</sub>		FORWARD VOLTAGE (MAX.) V <sub>F</sub> @ 3A	REVERSE CURRENT (MAX.) I <sub>R</sub> @ PIV		CAPACITANCE (MAX.) C @ -12V	SURGE CURRENT (MAX.) (NOTE 1) I <sub>F</sub> (surge)	REVERSE RECOVERY (MAX.) (NOTE 2) t <sub>rr</sub>
			AMPS			μA				
	VOLTS	VOLTS	VOLTS			pF			AMPS	n sec
			55°C	100°C		25°C	100°C			
JAN 1N5615	200	220	1.0	.750	.8 MIN.    1.6 MAX.	.5	25	45	25	150
JAN 1N5617	400	440	1.0	.750		.5	25	35	25	150
JAN 1N5619	600	660	1.0	.750		.5	25	25	25	250
JAN 1N5621	800	880	1.0	.750		.5	25	20	25	300
JAN 1N5623	1000	1100	1.0	.750		.5	25	15	25	500

NOTE 1:  $T_A = 100^{\circ}\text{C}$ ,  $f = 60\text{ Hz}$ ,  $I_O = 750\text{ mA}$ , 10-8 msec surges @ 1/minute

NOTE 2:  $I_F = 0.5\text{ A}$ ,  $I_{Rm} = 1\text{ A}$ ,  $i_{R(REC)} = .250\text{ A}$

## MILITARY RECTIFIERS

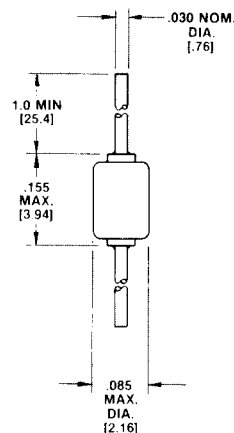


FIGURE 1  
PACKAGE A

## MECHANICAL CHARACTERISTICS

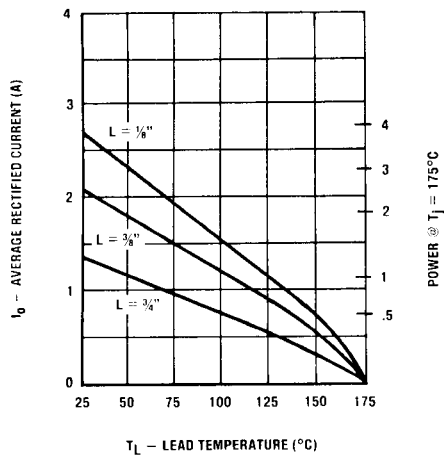
CASE: Hermetically sealed glass case.

LEAD MATERIAL: Tinned copper.

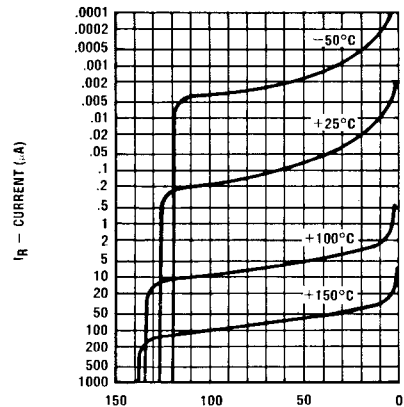
MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

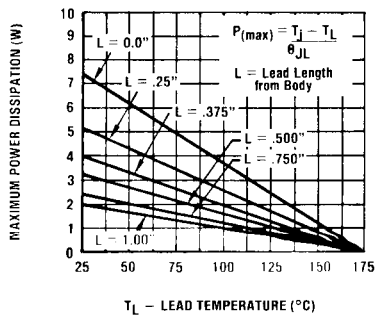
# 1N5615 thru 1N5623



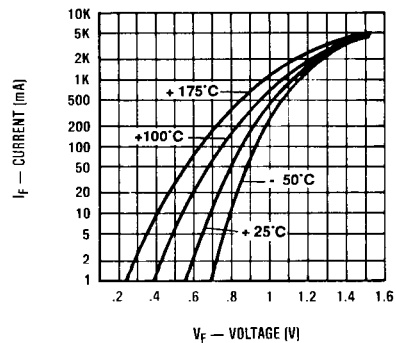
**FIGURE 2**  
MAXIMUM CURRENT  
vs. LEAD TEMPERATURE



**FIGURE 3**  
TYPICAL REVERSE CURRENT  
vs. PIV



**FIGURE 4**  
MAXIMUM POWER  
vs. LEAD TEMPERATURE



**FIGURE 5**  
TYPICAL FORWARD VOLTAGE  
vs. FORWARD CURRENT